



TELEMETRY GROUP

**IRIG STANDARD 106-07
PART II**

TELEMETRY NETWORKS

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KWAJALEIN MISSILE RANGE
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PART II**

TELEMETRY NETWORKS

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FOREWORD

The IRIG-106, *Telemetry Standards*, is now published in two parts. Part I contains the more familiar information and standards that have been developed over the years. Part II is devoted to the standards associated with the present technological evolution / revolution in the telemetry networks area.

A significant revision is planned for Part II. This revision will likely affect the technical content and structure of the document. For this reason, all the content of the previous version, IRIG STANDARD 106-01, Part II, has been rescinded and is not suggested for new designs.

These standards do not necessarily define the existing capability of any test range, but constitute a guide for the orderly implementation of telemetry systems for both ranges and range users. The scope of capabilities attainable with the utilization of these standards requires the careful consideration of tradeoffs. Guidance concerning these tradeoffs is provided in the text. The standards provide the necessary criteria on which to base equipment design and modification. The ultimate purpose is to ensure efficient spectrum utilization, interference-free operation, interoperability between ranges, and compatibility of range user equipment with the ranges.

This standard, published in two parts, is complemented by a companion series, RCC document 118, *Test Methods for Telemetry Systems and Subsystems*, and RCC document 119, *Telemetry Applications Handbook*.

The policy of the Telemetry Group is to update the telemetry standards and test methods documents as required to be consistent with advances in the state of the art. To determine the current revision status, contact the RCC Secretariat at White Sands Missile Range, New Mexico at (505) 678-1107 or DSN 258-1107 (usarmy.wsmr.atec.list.rcc@mail.mil).

CHAPTER 1

INTRODUCTION

1.1 General

Part II of the IRIG 106 Telemetry Standards addresses the standards specifically devoted to the area of Telemetry Networks. This part does not stand alone and must be used in conjunction with Part I of the 106 Telemetry Standards to define and implement a telemetry system.

1.2 Scope

The concept of Telemetry (TM) Networks is currently in development. Initial releases of this part of the standard, while incomplete, will reflect those areas of the technology mature enough to define methods, techniques, and/or specifications needed to ensure interoperability among and across the ranges. The Range Commanders Council (RCC) Telemetry Group (TG) plan is to systematically expand the standards and information in this part to the point users are able to totally implement a telemetry network from the acquisition of data through the transmission and/or recording process.

Rapidly changing technology and acquisition reform have led the Department of Defense to rely more heavily on commercial-off-the-shelf (COTS) hardware and software. Consequently, existing and near horizon commercial communications standards are envisioned to be implemented or tailored to the maximum extent possible. In general, the body of any adopted or adapted standard will not be repeated in this document, but cited in the list of reference documentation associated with each chapter. The source to obtain such documentation will be cited in those cases where the publications are not universally available.